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ABSTRACT

In 1979-80, a national study used a combination of the Older Americans Resources and Services Functional Assessment Questionnaire and the Subjective Distress Scale of Psychiatric Status Schedule to assess the service needs of the Hispanic elderly. Thirty variables were selected from this data and categorized using Anderson and Newman's (1973) framework for classifying individual determinants of service use to determine which factors predict the social service use of a subset of 209 Cuban elderly. This framework conceptualizes the individual's demand for services as a function of the relationship among predisposing, enabling, and need factors. A path analysis used to examine the relative importance of the factors indicated that six variables directly impacted the use of social services by the Cuban elderly and accounted for 45.5 percent of the variance in use. The strongest predictors of use were the enabling factors of awareness and income, followed by the predisposing factors of nativity, age density, and age, and by one need factor, the need for services. These findings suggest that the Cuban elderly (who have a higher frequency of awareness of social services, lower income, greater frequency of need, are foreign born, live in rural areas, and are older) have a tendency to use more social services. Social service delivery systems should focus more attention on the Cuban elderly who possess these characteristics. (NRB)

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The Cuban Elderly and Their Service Utilization Behavior

During the last fifty years the government has provided a broad range of social services to the elderly through the Social Security Act and the Older Americans Act. Although these programs are broad in nature and target all segments of the elderly population, little evidence exists to substantiate high utilization among various sub-groups of the elderly. Moreover, programs have often neglected ethnic and cultural differences among the aged in the delivery of services, which in turn has contribute to the lower use rates by those more needy groups. As a result, few gerontological studies have focused on factors that affect social service use and none have studied the minority group with the highest proportion of elderly in the United States, the Cuban Elderly (Queralt, 1983; Hernandez, 1974).

The utilization of health service has been extensively studied over the last twenty years. Anderson and Newman's conceptual framework has been widely employed to classify and analysis the large number of variables that are related to health service use (McKinlay, 1972). Little empirical knowledge exists to tell us if the factors that predict health service use are similar to those that predict social service use (Ward, 1977). One might assume that the causal factors that impact social services may be quite different than health services due to their discretionary versus non-discretionary nature. Moreover, few studies exist that have developed and tested causal models of service use by the Hispanic Elderly (Starrett et al, 1983; Starrett and Decker, 1984). Most of the Hispanic Elderly studies are of a descriptive nature and none focus on the Cuban Elderly (Valle and Mendura, 1978; Chellan and Meeks, 1980; Lagano, 1980). The

purpose of this study is to clarify this lack of knowledge by employing Andersen and Newman (1973) framework to examine what factors best predict the social service utilization behavior of the Cuban Elderly.

CONCEPTUAL FRAMEWORK

Anderson and Newman (1973) have proposed a sophisticated framework for classifying the individual determinants of service use. Their model conceptualizes the individual's demand for services as a function of the relationship among predisposing, enabling and need factors. Based on this model, some individuals are more inclined to use services because of certain background characteristics such as: demographic, social structural and beliefs (Predisposing Factor). However, service use is contingent upon the availability of community and family resources (Enabling Factor). Finally, the individual must recognize the need for services before actual use takes place (Need Factor). This model has been applied extensively to use of health services (Anderson and Aday, 1978; Berki and Kobashigawa, 1976; Wan, 1982; Wright et al., 1980) but rarely to social service utilization (Mindel and Wright, 1983; Starrett et al, 1983, 1984).

The utilization of service by the elderly in general, has been found to be partially determined by various socio-demographic factors (Kutner et al., 1956; Shanas, 1962, Shanas et al, 1968; McKinlay, 1972; Neugarten, 1974; McCaslin and Calvert, 1975; Downing, 1977; Mindel and Wright, 1982).

Several studies have found that social and psychological factors influence use (Coe and Wessen, 1965; Battistella, 1968; Fabrega and Roberts, 1972; Anderson and Newman, 1973; Bennett and Eckman, 1973; Harris, 1975, Lowry, (1979). Other studies suggest that economic, community, geographic, organizational, societal, and environmental factors are related to use

(Palmore, 1972; McKinlay, 1972; Anderson et al., 1972; Hammerman, 1974; Cutler, 1975; Cantor, 1975; Cantor and Mayer, 1976; Ward, 1977). Still other studies suggest that the perception and intensity of needs, the knowledge of services, and the availability and accessibility of formal and informal support systems are critical factors influencing use (Lipman and Sterne, 1969; Mechanic, 1962; Gaspard and Hopkins, 1967; McKinlay, 1972; German, 1975; Wright et al., 1979; Hess and Markson, 1980; Mindel and Wright, 1982). In addition, the importance of the kinship and friendship systems in providing help and support to the elderly is well documented (Shanas, 1967; McKinlay, 1972; Shanas, 1973; Hays and Mindel, 1973; Hill, 1972; Staples, 1976; Shanas, 1979; Cantor, 1979; Dowd and Bergtson, 1978; Mindel and Wright, 1982). Overall, these studies have found that need was the strongest predictor of use of health services. The enabling and predisposing factors were only weakly associated with use leading Wolinsky (1978) to question the relevance of these factors. However, because of the discretionary nature of social services and the diversity that exist among elderly ethnic groups, the predisposing and enabling factors may take on greater predictability than the need factor. (Ward, 1977; Starrett et. al, 1984).

This study employs the Anderson and Newman model, prior research, and select knowledge to classify the thirty variables employed to test a causal model of social service utilization by the Cuban Elderly. The results should answer the following questions:

(1) which factors (e.g. need enabling or predisposing) are most important in determining the use of social services?

(2) How much variance in utilization can be explained by the variables in the model?

(3) What is the magnitude of direct and indirect effects of the predictor of service use? and

(4) Do the Cuban elderly have a discrete pattern of social service use?

METHODS

The data used in this study represents a subset of 209 Cuban Americans selected from a data set collected in 1979-80 entitled "A National Study to Assess the Service Needs of the Hispanic Elderly" (Principal Investigated, Carmela G. Lacayo) and provided by the National Association of Hispanic Elderly. The original data was gathered from a national area probability sample. The sample was stratified by geographical region to assure adequate representation of Hispanics in regions of highest Hispanic population. The sample was drawn from fifteen states with the states of California, Texas, Florida and New York representing a heavier sampling of elderly Hispanics. It is estimated that the sampling error is approximately 5%.

The characteristics of the sample: sexual composition - 41% males and 59% females; the mean age was 67; marital status - not married 37% and married 63% mean education was 8 years: mean income was 5,000.00 dollars, mean use rate 1.2 services and mean number children 2.7.

The original study data were obtained from interviews administered in the respondent's home, using a pretested instrument constructed by the National Association for Hispanic Elderly in consultation with the Administration of older Americans (AOA), the United States Bureau of Census, and Kaiser Permanente Research Department. The resulting instrument was a combination of the Older American Resources and Services Functional Assessment Questionnaire (OARS) and the Subjective Distress Scale of Psychiatric Status

Schedule (PSS). It was translated into Spanish and administered by bilingual interviewers. Thirty variables were selected from this data for the current study based on prior research and availability and classified according to the Anderson and Newman (1973) framework, as shown in Figure 1.

The measurement of those variables included in the study are shown in Table 1. The variables are classified by presdisposing enabling and need factors along with the variable labels and coding scheme.

The method of analysis used to examine the relative importance of the factors that best predict social service use was path analysis. The basic model presented earlier was transformed into a set of structural equation from which standardized partial regression coefficients (beta weights) can be estimated. Only those Beta weights that are statistically significant at the .05 level or greater and account for 1% of the variance were included in the final analysis. The order in which the variables were entered into the final analysis is shown in Figure 1.

RESULTS

The results of the path analysis and the decomposed path associations are Shown in table 2 and figure 2. Figure 2 and Table 2 respectively indicate that six of the twenty-nine variables in the study directly impacted the utilization of social services by the Cuban elderly. These six variables accounted for 45.5% of the variance in use. The strongest predictor of use was the enabling factor (i.e., awareness and income) which accounted for 34.8% of the varience followed by the predisposing factor (i.e. nativity, age density and age) accounting for approximately 10% of the variance in use.

Among the variables included in the need factor only the number of social

service needed (.22) directly predicted use. This finding suggests the greater the need for service the greater the use of social services. Need for social service was directly affected by six variables; sex discrimination (.24) currently living in the East Coast (.26) low functional literacy with forms in English (-.16) being disabled (.17) contact with children (.15) and living in the West (.13). It appears that those elderly who have experienced more sex discrimination, live on the East or West Coast versus South, have greater difficulty with forms printed in English, are disabled, and have more contact with children, have greater need for services and thus greater use.

The findings for variables conceptualized as the enabling factor, the amount of awareness of social services (.43) and income (-.26) or working (-.19) living in the East Coast (.18) not being a U.S. citizen (-.17) and contact with relatives (.15), indicate that those cuban's who have greater contact with their children or relatives, are retired, live on the East Coast or are not citizens, have a greater awareness of service and a greater service use. Annual family income had an inverse relationship with use which suggest that as income decreases, utilization of social services increases. Income was directly affected by marital status (.27), age (-.26), employment statistic working (.16), English speaking ability (.16) ethnic discrimination (.16) not living alone (-.12) U.S. citizenship (.15) and being born outside the U.S. (-.14). Elderly Cuban with higher incomes have the following characteristics: they are younger, married, working, do not live alone, fluent in English, higher perceive ethnic discrimination, are U. S. citizens and were born outside U.S.

Three of the predisposing variables (e.g. nativity (-.16) age density (-.14) and age (.14)) directly predicted utilization. Both the nativity and the age density variables had an inverse relationship with use suggesting that utilization

increases for elderly persons of foreign birth or living in lower age density areas. Moreover, it would appear the use of social services increases with age. Age also indirectly affected use through its impact on income. However, since the spurious effect of age on use is equal to its direct effects any interpretation of this variable is questionable.

CONCLUSION

The Anderson and Newman (1973) model of service use provided a useful tool for analyzing the social service behavior of the Cuban elderly. The findings suggest the awareness of social services (enabling factors) was the strongest predicter of use followed by income (enabling), need for services (need factors), those nativity, age density and age (predisposing). Those Cuban elderly who have a higher frequency of awareness of social services, lower incomes, greater frequency of need, are foreign born, live in rural areas and are older, have a tendency to use more social services.

The major findings of this study support the tentative theoretical assumption that due to discretionary nature of social services use the enabling and predisposing variables take on greater importance than the need variables. More importantly, the enabling factor predicted use 7½ times stronger than the need factor with the predisposing factor 50% stronger than the need factor. Although prior studies suggest the importance of the enabling factors in social service use behavior, none have found such differences (Mindel and Wright, 1982; O'Dell and Wan, 1981, Starrett et al, 1983). Moreover, no studies have found the predisposing variables to be better predictors of use than need (Wolinsky, 1978).

The major finding of this study may be partially explained by the discre-

tionary nature of social service use as compared to the nondiscretionary nature of health service. Anderson and Newman (1973) suggest that service use will vary by type of service and empirical research has supported this contention (O'Dell and Wan, 1981; Starrett et al, 1984). The difference between the need and enabling factors may in addition, be accounted for by the impact of income (a enabling factor) on use and ethnicity (i.e. being a Cuban). A plausible explanation may be that due to the cultural and historic background of the Cuban elderly, their definition of need becomes less important than their income level. Moreover, since social services are not purchased on the open market, the negative effect of income may reflect the intent of federal policy that the greatest priority in service delivery be given to the most needy. Moreover, these findings have some important policy implications. First, social services use can either be increased or decreased by controlling level of knowledge about services. Second, income level may be a more important predictor than need for discretionary services use. Additionally, enabling factors that facilitate or inhibit an individual's to use of discretionary service may be more amenable to change through policy than predisposing or need factors. Further research is needed to explore the impact of enabling factors on use by other aging ethnic groups in order to determine if these factors more important then need across groups.

The findings of this study for the first time support the importance of the predisposing variables as direct predictors of social service use (Wolinsky R., 1929). The characteristics that predispose the Cuban elderly to use services were being foreign born, living in a rural area, and being older. These factors reflect important historical and cultural consideration in service delivery and developing policy for the Cuban elderly. For example, most Cuban

imigrants have settled in large urban areas where large service delivery systems have evolved to meet their needs, however, those elderly who live in rural areas are using more services. Research is needed to explain this phenomena. In addition, policy and service delivery should reflect the higher use of services by the rural elderly, those that are older and born outside the U.S. However, what happens to those Cuban elderly with other characteristics.

Some additional predisposing variables that are not found in prior research had a indirect impact on use of services by the Cuban's were region of the county currently living in, citizenship, contact with kin, functional literacy and discrimination. Those individuals living in the eastern states are more aware of services than other sections and both eastern and western regions have more social service needs. Thus, regional variations need to be considered in policy formulation and service delivery to ethnic groups. Those elderly who were non U.S. citizens were more aware of services but those elderly who were citizens had higher incomes. It may be that non-citizens may not qualify for services other than those administered through the Older American Acts and as a result have a greater knowledge of those types of services. In addition, those individuals with greater contact with kin and children/relatives were more aware of services. Thus, kinship maybe a viable avenue for information and referral services support for the elderly. Moreover, those Cuban's who felt more sexual discrimination and were less functionally literate had greater service need. These factor's appear to highlight that important discrimintory barriers still exist in our society.

The present study has sought to empirically analyze the causal factors that determine the utilization of social services by the Cuban elderly. Due

to the discretionary nature of social service usage it was assumed that the enabling and predisposing factor would take on greater predictability in use than the need need for factor. These assumptions were confirmed. Since social service use is different in nature than non-discretionary services, it is recommended that social service delivery systems focus more attention on the Cuban elderly who are characterized by lower incomes, older, foreign born, more needy, and living in lower age dense areas. The local media and church may be ideal mechanics for increasing group's awareness of social services and, at the same time, providing unobtrusive networking with the kinship system of the Cuban elderly.

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TABLE 1

OPERATIONALIZATION OF ALL THE FACTORS
AND VARIABLES IN THE STUDY

Factor	Variable	Label	Code
Predisposing	Nativity (where born)	Other	0
		US	1
	Current U.S. Citizen	No	0
		Yes	1
	Gender	Female	0
		Male	1
	Marital Status	Not married	0
		married	1
	Age		Actual Age
	Current Region Living in	South	0
		East	1
		West	1
		Southwest	1
	Education		Actual # of years of education Range (0-17)
	Age density		Percent of Elderly per Census Tract
	Functional Literacy in English (i.e., frequency speaking english at home)	Seldom to all the time	1 0 5
	Functional Literacy i.e., Difficulty in filling out forms in English	Very difficult to Not difficult	1 0 3
	Family size		Actual number children

Table 1 (Continued)

Factor	Variable	Label	Code
	Residential mobility number of cities lived in in the five years	no other city to five or more cities	0 0 5
Present	Employment status	Retired working Disabled Housewife	0 1 1 1
Predisposing	Social economic status prior to retirement		Was measured by classifing (i.e. work done most of your life) occupation by U.S. census work classification code from 0 through 100
	Sexual Discrimination		By summing the actual number of perceived sexual discrimation experienced by the respondence in areas of (employment, Housing, Education, and Health Care) Range (0-4)
Space	Ethnic Discrimination Age Discrimination		Same Same
Enabling	Accessibility of Transportation		Actual number of blocks to the bus stop.
	Frequency in Church Attendance	Never to more than once a week	1 0 6
	Frequency of Participation in Senior church activities	Never to very often	1 0 5

Table 1 (Continued)

Factor	Variable	Label	Code
	Frequency of Contact with friends/neighbors	None to everyday	0 1 4
	Living arrangements	Other spouse children both spouse and children alone	0 1 1 1 1
	Annual family	0	0-499
		8	7M-9,999
		15	40,000-above
	Frequency of Contact with Kin (i.e., children and relatives are measured separately)	None to everyday	0 0 4
	Awareness of social services		Measured by summing the number of social services out of 13 that the respondent was aware of. Range (0-13)
Need	Self-rated Health status	Very poor to Very good	1 0 5
	Functional (ADL)		By summing the number of difficult daily living tasks out of 12. Range (0-12)
	Need for		Measured by summing the number of social services out of 13 that the respondent needed. Range (0-13)

Table 1 (Continued)

Factor	Variable	Label	Code
Utilization	Use of Social		Measured by summing the number of social services out of 13 that the respondent used. Range (0-13) (service categories: retirement, rides home meals, service center, housework, information, legal aid, consumer ed, food stamps, assistance/tax, financial assistance and recreational.)

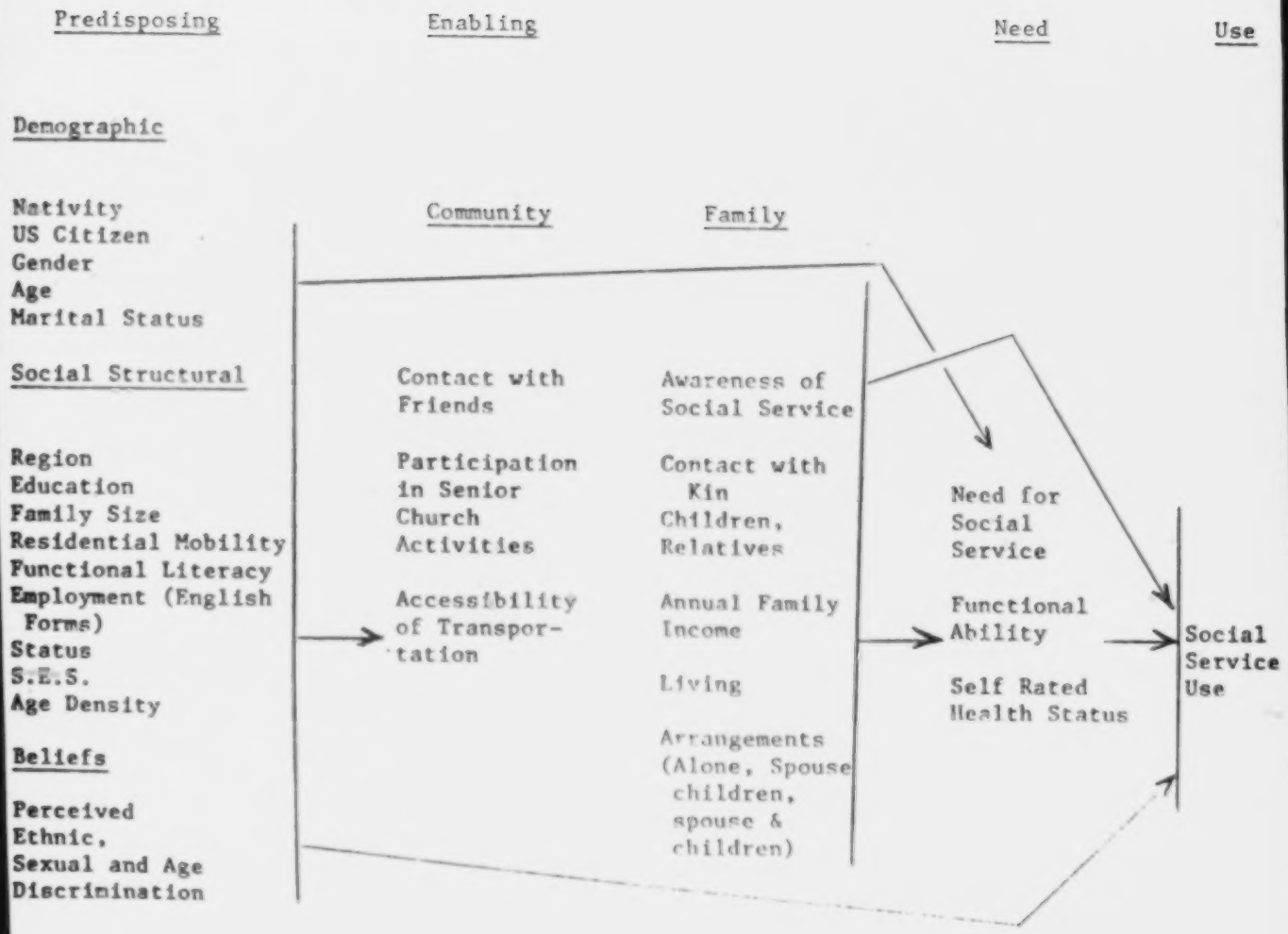
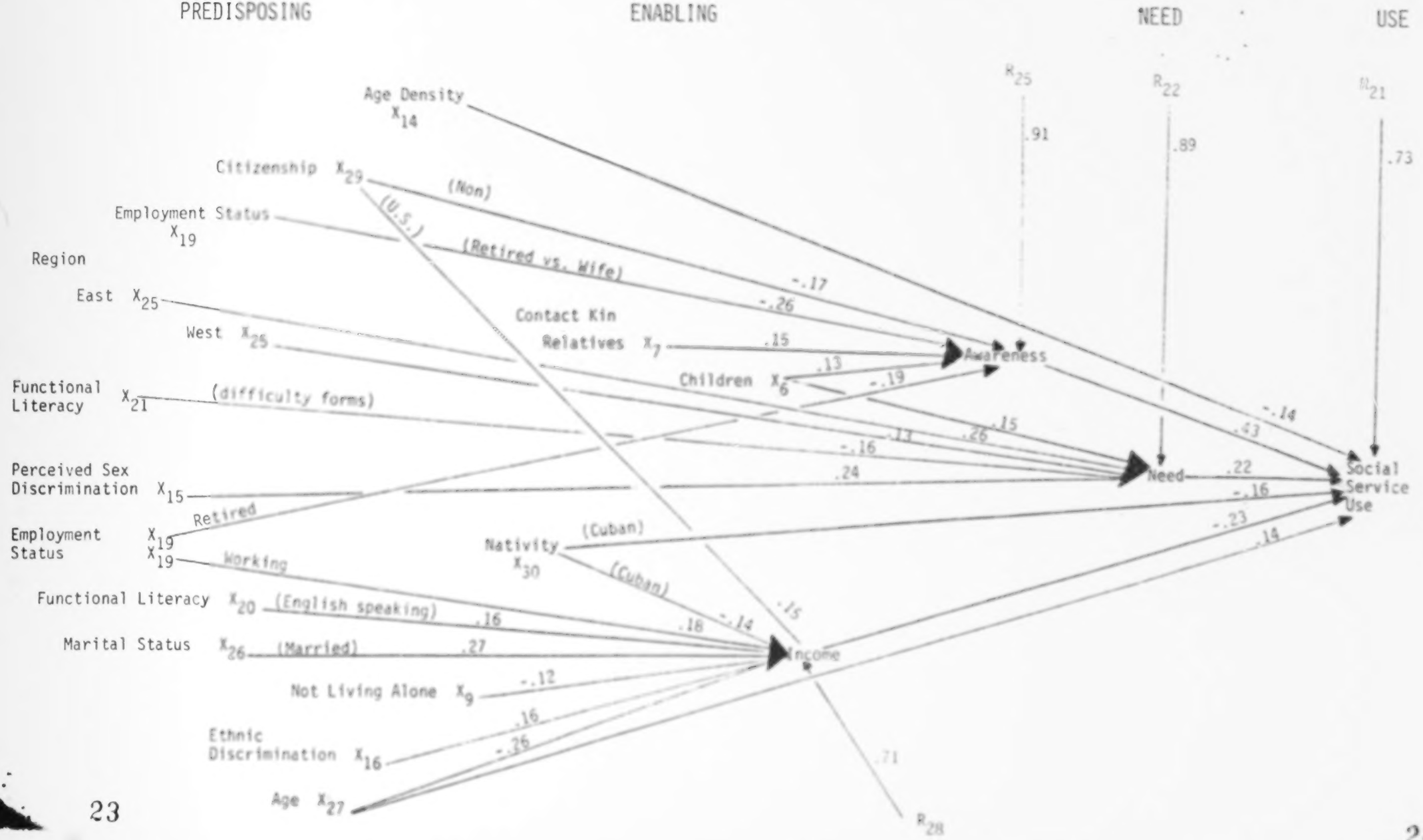


FIGURE 1. BASIC PROPOSED CAUSAL MODEL

TABLE 2

TOTAL ASSOCIATIONS, DIRECT AND INDIRECT EFFECTS OF ONLY THE SIGNIFICANT RELATIONSHIPS IN THE MODEL

Dependent & Coefficient of Determination (R^2)	Independent	Total Association	Direct Effect	Indirect Effect	Spurious
(Direct Effects within the model)					
Utilization	Variables		Beta		
R = .46	Awareness	.50	.43	.07	.00
	Income	-.32	-.23	-.09	.00
	Need	.31	.22	.09	.00
	Nativity	-.14	-.16	.02	.00
	Age Density	-.11	-.14	.03	
	Age	.34	.14	.06	.14
(Indirect effects within the model)					
Need	Sex. Dis.	.22	.24	-.02	.00
R = .20	East	.22	.26	-.04	.00
	Functional Literacy (forms)	-.12	-.16	.04	.00
	Disabled	.15	.17	-.02	.00
	Contact Children	.16	.15	.01	.00
	West	.12	.13	-.01	.00
Awareness	Contact	.21	.13	.08	.00
R = .16	Children				
	Housewife/Retired	-.18	-.26	.08	.00
	Working/Retired	-.11	-.19	.08	.00
	East	.17	.18	-.01	.00
	Citizen	-.06	-.17	.11	.00
	Contact relatives	.15	.15	.00	.00
Income	Marital Status	.50	.27	.23	.00
R = .49	Age	-.48	-.26	-.22	.00
	Working	.37	.18	.19	.00
	English	.17	.16	.01	.00
	Ethnic Dis.	.25	.16	.09	.00
	Nobody	-.29	-.12	-.17	.00
	Citizen	.26	.15	.11	.00
	Nativity	-.02	-.14	.12	.00


PREDISPOSING
ENABLING
NEED
USE
Age Density X14
Citizenship X29
(Non)
(U.S.)
Employment Status X19
(Retired vs. Wife)
Region
East X25
West X25
Contact Kin
Relatives X7
Children X6
Functional Literacy X21
(difficulty forms)
Perceived Sex Discrimination X15
Employment Status X19
Retired
Working
Functional Literacy X20
(English speaking)
Marital Status X26
(Married)
Not Living Alone X9
Ethnic Discrimination X16
Age X27
Nativity X30
(Cuban)
(Cuban)
Income
R25
R22
R21
R28
.91
.89
.73
.71
-.17
-.26
.15
.13
-.19
.13
.26
.15
-.16
.24
.43
-.14
.22
-.16
-.23
.14
.18
-.14
.15
.27
-.12
.16
-.26
Awareness
Need
Social Service Use